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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/564,303

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Akio Uchiyama

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EXAMINER

DANEGA, RENEE A

ART UNIT

PAPER NUMBER

3736

MAIL DATE

DELIVERY MODE

06/15/2010

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/564,303	<b>Applicant(s)</b> UCHIYAMA ET AL.	
	<b>Examiner</b> Renee Danega	<b>Art Unit</b> 3736	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 12 March 2010.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-4,6-17 and 41-43 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-4,6-17 and 41-43 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)         | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)         | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____   | 6) <input type="checkbox"/> Other: _____                          |

## DETAILED ACTION

### ***Claim Rejections - 35 USC § 103***

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-4, 6-8, 10-17, and 41-43 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wang (US 20050148842) in view of Iddan (US 20020111544) and of Gazdzinski (US 20010051766).

- Regarding claims 1-3, Wang teaches an in-vivo information acquisition apparatus comprising a specimen-collecting section ("biopsy specimen collection/storage"), a specimen evaluating section for evaluating measurement data (LEDs and optical sensor) a communication section (communication means) for receiving a signal and transmitting a signal, and a power supply section (power supply) and an indwelling section capable of affixing to a tissue surface in the body cavity (motorized driving blades) (Figures 1, 3) [0062] [0074] [0075] [0086-0089]. Wang doesn't expressly teach a reactor section for reacting the specimen with a reagent. However Iddan teaches a reactor section for reacting a specimen with a reagent and that evaluation is well known based on color changes of the reagent [0034] [0035]. It would have been obvious in view of Iddan to

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provide a color changing reagent in Wang in order for the system to identify characteristics such as pH. Wang doesn't expressly teach a labeling section. However, Gazdzinski teaches an endoscopic probe with an RFID tag which allows for the writing or reading of multiple probes simultaneously [0223]. It would have been obvious in view of Gazdzinski to provide a RFID label on the apparatus in order to distinguish amongst information being collected from multiple apparatuses.

- Regarding claims 4, 7, 8, Wang teaches a battery but doesn't teach it in wireless communication with an external supply. However, Gazdzinski teaches a power supply control (702) that controls power supply based on when the communication sections receives a signal from the outside, wherein the power supply is an externally chargeable power storage section that is power wirelessly (Figure 7) [0348] eliminating the need for in vivo energy storage. It would have been obvious in view of Gazdzinski to provide external power control in Wang in order to eliminate the need for in-vivo storage and to conserve energy.
- Regarding claim 6, Wang doesn't expressly teach an adhesive container for storing a biocompatible adhesive and release section. However, Gazdzinski teaches a container and release [0270] that would be capable of releasing a biocompatible adhesive. It would have been obvious in view of Gazdzinski to provide a control release container in Wang in order to get a material to a desired area of the body.

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- Regarding claim 10, Wang teaches the specimen evaluating section to include a photo detector [0060].
- Regarding claim 11, Wang teaches an illumination system (LEDs) in the device for emitting light on the specimen (Figure 2).
- Regarding claim 12, Wang teaches the illuminating element to be a wavelength tunable light source [0115].
- Regarding claims 13 and 14, Wang teaches detecting units including blood sensor and protein sensors [0031] [0040].
- Regarding claim 15, Wang teaches the specimen evaluating section functions as an enzyme sensor for detecting a particular enzyme [0031] (Table 4)
- Regarding claim 16, Wang teaches the specimen evaluating section acts as a gene sensor for detecting a particular gene [0031] (Table 4).
- Regarding claim 17, Wang teaches an imaging section [0051].
- Regarding claim 41, Wang teaches a method of acquiring in vivo information performed by an in vivo information acquisition apparatus comprising the steps of inserting an in vivo information acquisition apparatus into the body; collecting a specimen at an examination site in a body cavity; evaluating the specimen and outputting an evaluation result; receiving a signal transmitted from the outside and transmitting to the outside an evaluation result; and supplying the apparatus with electrical power [0061] [0074] [0088] [0105]. Wang doesn't expressly teach reacting

a specimen with a reagent. However Iddan teaches a reactor section for reacting a specimen with a reagent and that evaluation is well known based on reference color changes of the reagent [0034] [0035]. It would have been obvious in view of Iddan to provide a color changing reagent in Wang in order for the system to identify characteristics such as pH. Wang doesn't expressly teach supplying a labeling section. However, Gazdzinski teaches However, Gazdzinski teaches an endoscopic probe with an RFID tag which allows for the writing or reading of multiple probes simultaneously [0223]. It would have been obvious in view of Gazdzinski to provide a RFID label on the apparatus in order to distinguish amongst information being collected from multiple apparatuses.

- Regarding claim 42, Wang teaches the specimen-evaluating section includes an arithmetic section for operating an arithmetic operation and wherein the measurement data and reference data are subjected to the arithmetic operation in the section so as to calculate examination data [0074] [0075].
- Regarding claim 43, Wang teaches the specimen-evaluating section to include a computer analysis system which are commonly known to have internal memory [0074] (Figure 3).

3. Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over Wang modified by Iddan and Gazdzinski as applied to claim 1 above, and further in view of Couvillon, Jr. (7063671).

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- Regarding claim 9, Wang teaches a shutter for closing the cell enclosure after the specimen is introduced into the interior of the cell enclosure but doesn't teach it to be controlled by an ion-conducting actuator doesn't expressly teach the specimen evaluation section having an ion-conducting actuator shutter for introducing the specimen [0092]. However, Couvillon, Jr. teaches using a cutting shuttered ion control aperture to capture a specimen in vivo callable of exerting a strong actuation force (abstract) (Figure 1) (column 2, lines 12-30). It would have been obvious in view of Couvillon, Jr. to use an ion-conducting actuator shutter in Wang order to exert a strong actuation force to collect a specimen sample to be tested in vivo.

### ***Response to Arguments***

4. Applicant's arguments with respect to the claims have been considered but are not persuasive. Wang teaches the device finds and compares a ratio which is the product of an arithmetic operation in order to evaluate internal abnormalities which was referred to in [0075] and [0074] has been cited above for further clarification. It may be argued that this portion of the evaluation section is external of the body, however the claims only require the device to acquire and evaluate information about a site in-vivo.

### ***Conclusion***

5. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP

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§ 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Renee Danega whose telephone number is (571)270-3639. The examiner can normally be reached on Monday through Thursday 8:30-5:00 eastern time.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Max Hindenburg can be reached on (571) 272-4726. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.



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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

RAD

/Max Hindenburg/  
Supervisory Patent Examiner, Art Unit 3736